



Howard Corners Intersection Scoping Study

Scoping Report Presentation

February 21, 2018

Introductions

Howard Corners Intersection Scoping Study Team:

Consultant Team:

Corey Mack, PE

Consultant Project Manager

Roxanne Meuse, EIT

Consultant Planner and Designer

Public Works Team:

Susan Molzon

Nicole Losch

Steering Committee:

Scott Mapes

Resident

RJ Lalumiere

Walk-Bike Council

Ross Gouin

VTrans Supervisor



Why We're Here

Burlington was awarded a grant to study the **Winooski – Howard – St Paul** intersection and evaluate alternative designs that can be implemented to **improve safety, meet accessibility standards, and foster an emerging neighborhood.**

An **Intersection Scoping Study** includes:

- Existing Conditions Review
- Local Concerns Meeting (November 11, 2016)
- Alternatives Development and Analysis
- Alternatives Presentation Meeting (June 27, 2016)
- Final Scoping Report  **Demonstration: July 26 – July 30, 2017**
- **Scoping Report Presentation (Tonight)**



Location Map



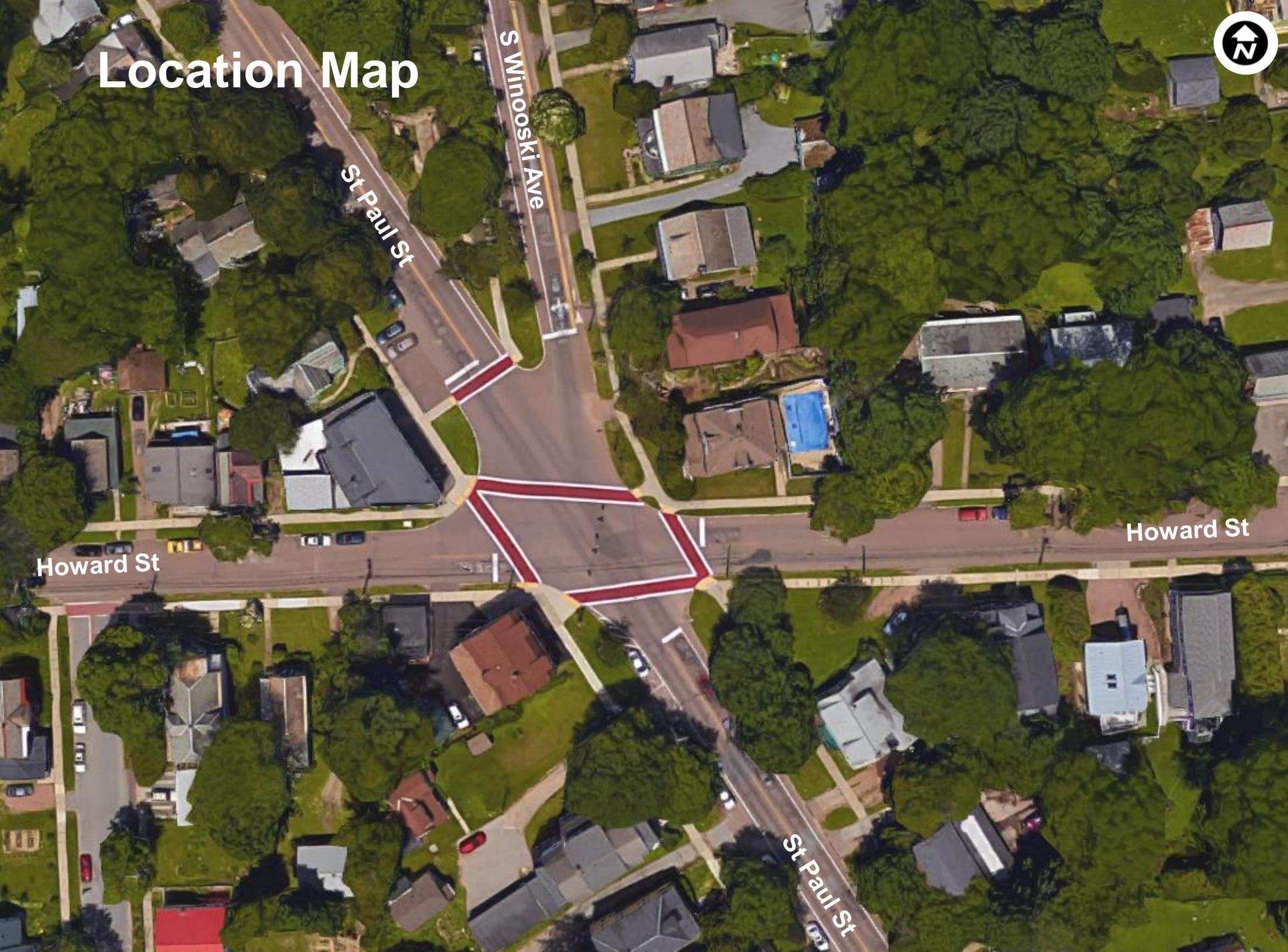
Howard St

St Paul St

S Winoski Ave

Howard St

St Paul St



Local Concerns Meeting – November 12, 2016





What We Learned...

No bus shelter or transit amenities

Potvin Park underutilized

Trucks on S. Winooski Ave. (trucks prohibited)

Underdeveloped pedestrian environment

Howard St

33 crashes in 5 years

Crosswalks and distance bikes have to travel too long for green time

Observed speeding

Bicycle facilities end abruptly

No crosswalk across S. Winooski Ave.

No pedestrian phase, signals, actuation

Howard St

Signals can be difficult to see

Overtaking left turning vehicles on the right

Observed red light running

St Paul St





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Howard St

St Paul St

S Winooski Ave

St Paul St



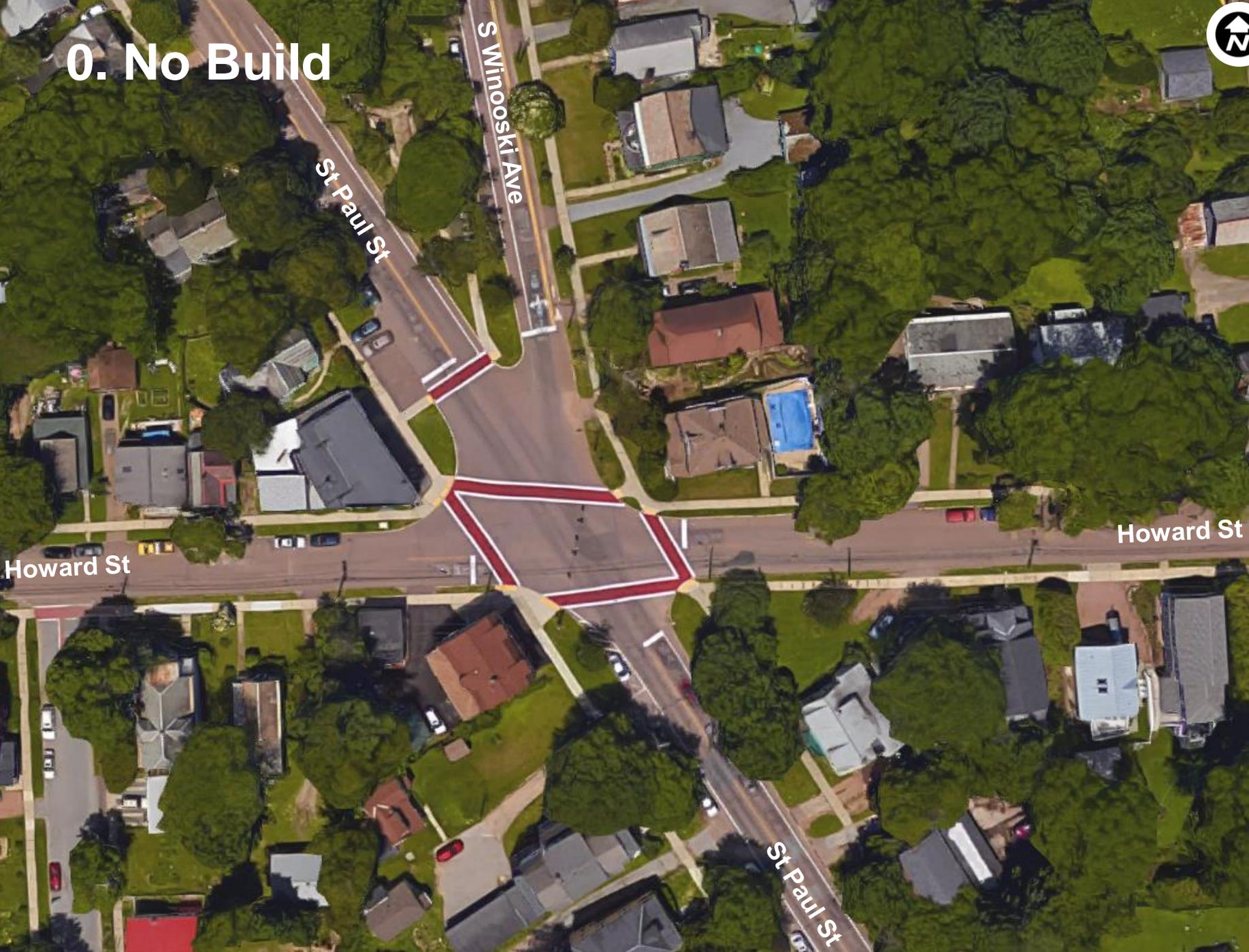
Alternatives

0. No Build
1. Quick Build Project
2. New Signal System – Existing Geometry
3. New Signal System – Realigned Roadway
4. Dual Roundabout – Realigned Roadway
5. Modern Roundabout





0. No Build



Howard St

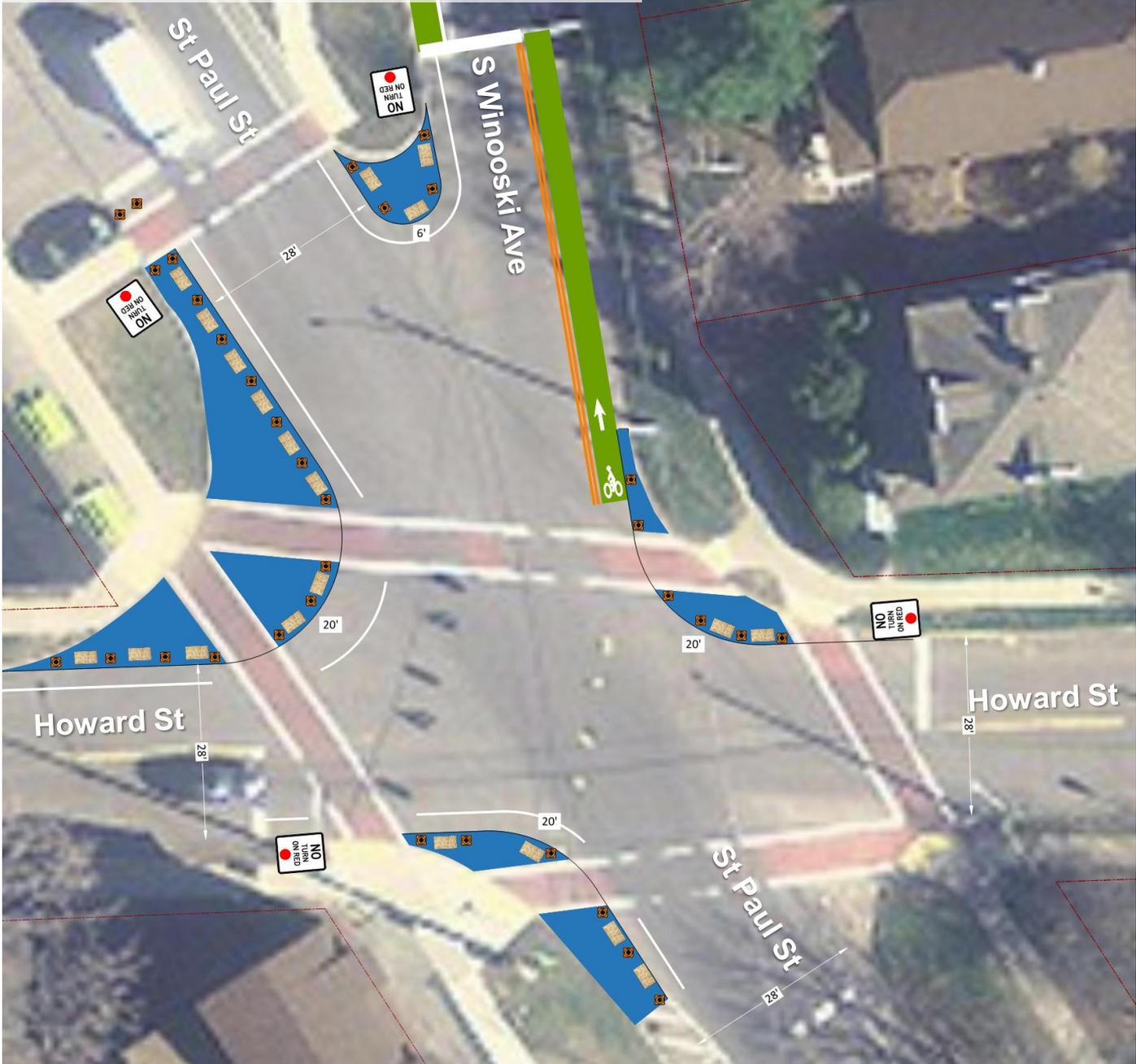
St Paul St

S Winooski Ave

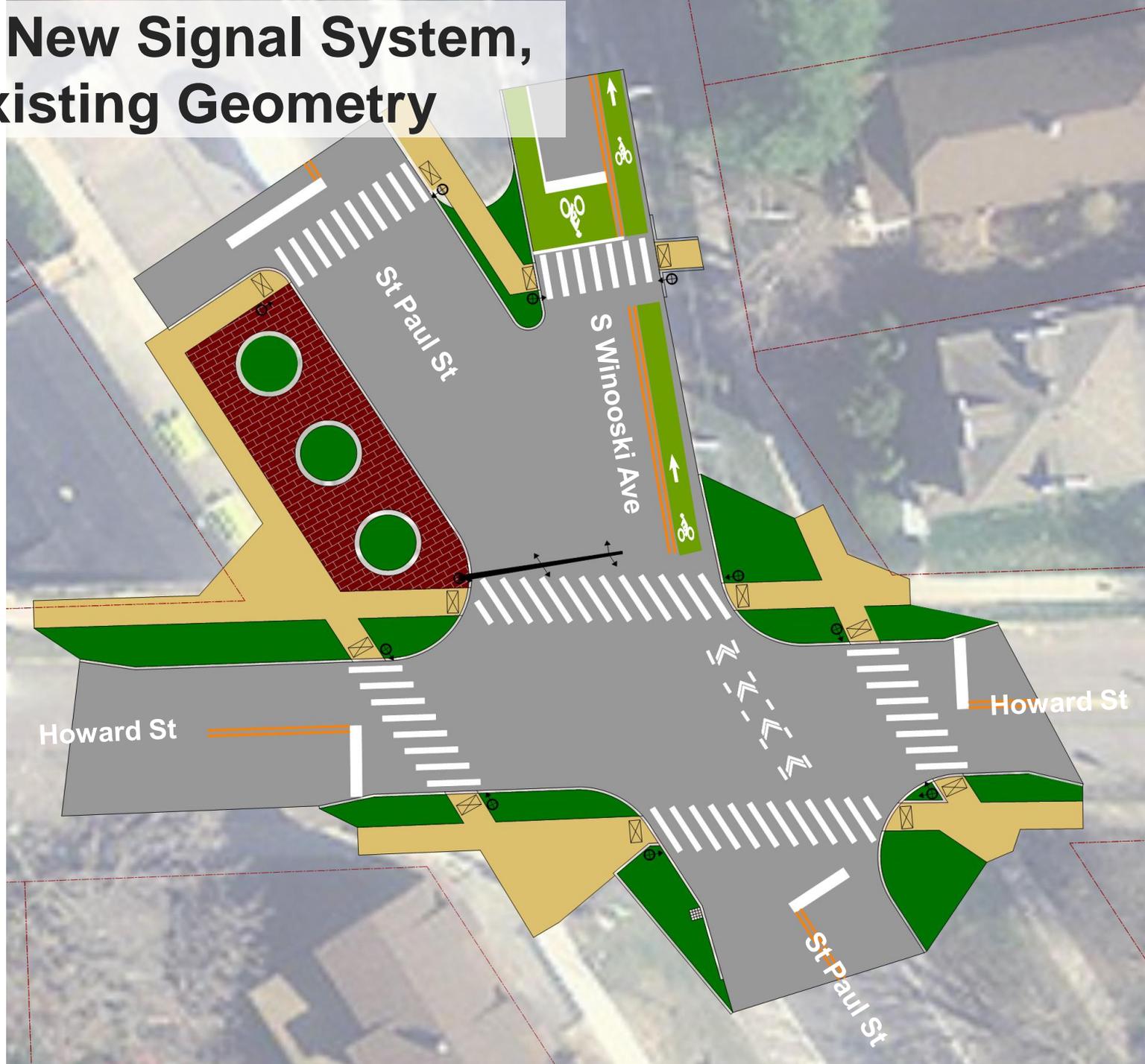
Howard St

St Paul St

1. Quick Build Project



2. New Signal System, Existing Geometry



3. New Signal System, Realigned Roadway



4. Dual Roundabouts, Realigned Roadway



5. Modern Roundabout



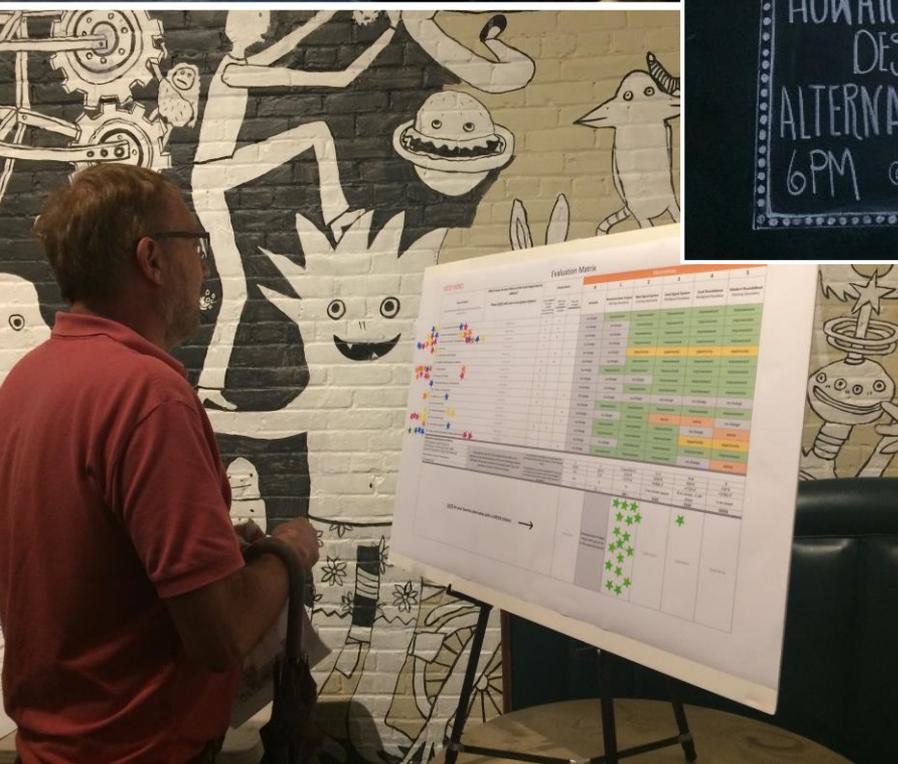
XX. Single Mini-Roundabout



Alternatives Presentation Meeting



TONIGHT AT ARTS RIOT
HOWARD CORNERS
DESIGN
ALTERNATIVES
6PM @arts riot



VOTE HERE!

**#1 Public Issue:
Pedestrian Crossing of
South Winooski Ave**

**Alternative 2 - New
Signal System:
nearly unanimous**

**#2 Public Issue:
Supporting Local
Businesses**

Issues to Address (developed based on public input and the project team's observations)	Which issues do you think are most important? Please Vote	Alternatives				
		1 Demonstration Project Existing Geometry	2 New Signal System Existing Geometry	3 Dual Signal System Realigned Roadway	4 Dual Roundabout Realigned Roadway	5 Modern Roundabout Existing Geometry
1 Crossing length for all modes	Vote here!	improvement	improvement	improvement	improvement	improvement
2 Pedestrian crossing guidance	Vote here!	no change	improvement	improvement	improvement	improvement
3 Pedestrian crossing of S. Winooski Ave	Vote here!	no change	improvement	improvement	improvement	improvement
4 Crash rate	Vote here!	no change	no change	opportunity	opportunity	opportunity
5 Comfortable transit facilities	Vote here!	no change	improvement	improvement	improvement	improvement
6 Visibility of traffic signals to motorists	Vote here!	no change	improvement	improvement	improvement	improvement
7 Vehicle speeds	Vote here!	improvement	improvement	improvement	improvement	improvement
8 Running of red lights	Vote here!	no change	no change	improvement	improvement	improvement
9 Wrong-way driving on S. Winooski Ave	Vote here!	no change	no change	no change	no change	no change
10 Trucks on S. Winooski Ave	Vote here!	improvement	improvement	improvement	improvement	improvement
11 Right turns on red	Vote here!	improvement	improvement	worse	worse	no change
12 Use of Potvin Park	Vote here!	improvement	improvement	improvement	no change	worse
13 Public gathering space	Vote here!	improvement	improvement	improvement	opportunity	opportunity
14 Bicycle infrastructure	Vote here!	improvement	improvement	improvement	improvement	improvement
15 Stormwater management	Vote here!	improvement	improvement	improvement	no change	worse
16 Support relationship between residents and businesses	Vote here!	improvement	improvement	improvement	no change	worse

Additional Key Study Elements and Metrics	These elements are not directly associated with the three project goals. (That's why they're in this separate space.)	C	E (possible C)	C+C	B+B	B
Traffic Operations: Total Length of Service (A-F)	These are key elements of this study and may inform your opinions/vote on the alternatives, but they are not being voted on individually. Please see a member of the project team if you have questions or concerns about any of these.	760 ft	1220 ft	1100 ft	690 ft	310 ft
Traffic Operations: Total Average Queue Length		0 sf	+1270 sf	+5300 sf	+7720 sf	+3760 sf
Stormwater Management: Change in Permeable Area	"But what about stormwater management?" you may ask. That one can be voted on above even though it's not directly associated with a project goal, because it's that special.	n/a	0	-7 on-street spaces	-8 on-street, -5 off-street	-1 on-street
Parking Options: Change in Spaces		\$\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$
Cost: Relative Cost						

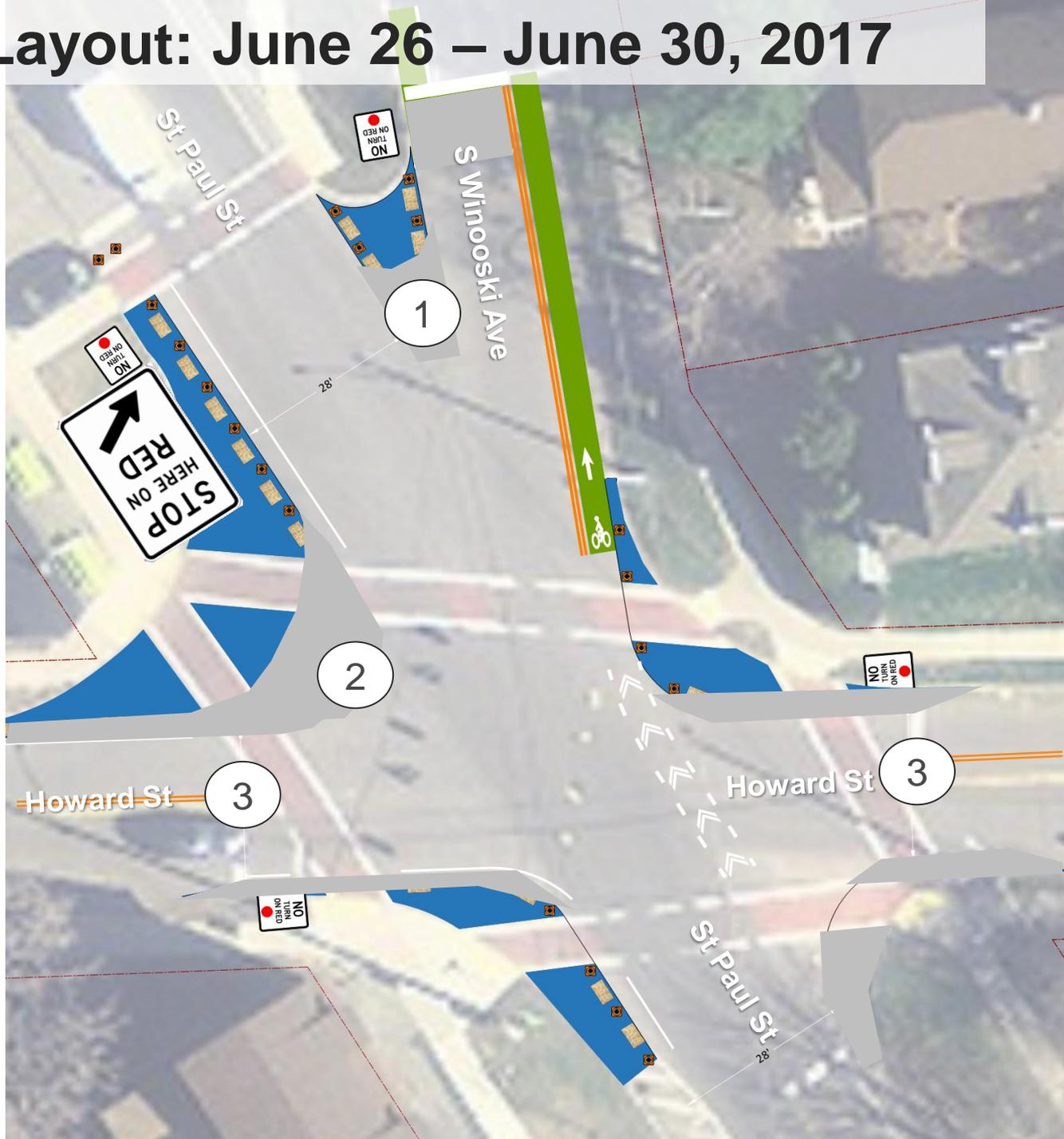
Demonstration: June 26 – June 30, 2017



Demonstration Layout: June 26 – June 30, 2017

What we learned from Demonstration Project:

- 1. Increase SB Winooski – St Paul right turn curb radius
- 2. Increase SB St Paul - Howard right turn curb radius
- 3. Maintain existing Howard Street width
- 4. STOP HERE ON RED sign



Recommendation: Quick Build Project – Part 1

- Modified from results of Demonstration Project:
1. Incorporating lessons learned from Demonstration Project
 2. Continue to monitor and refine design based on operation



Volunteer / DPW Labor: \$20,000

Recommendation: Quick Build Project – Part 2

Install concrete features from Quick Build refinements for South Winooski Avenue crosswalk:

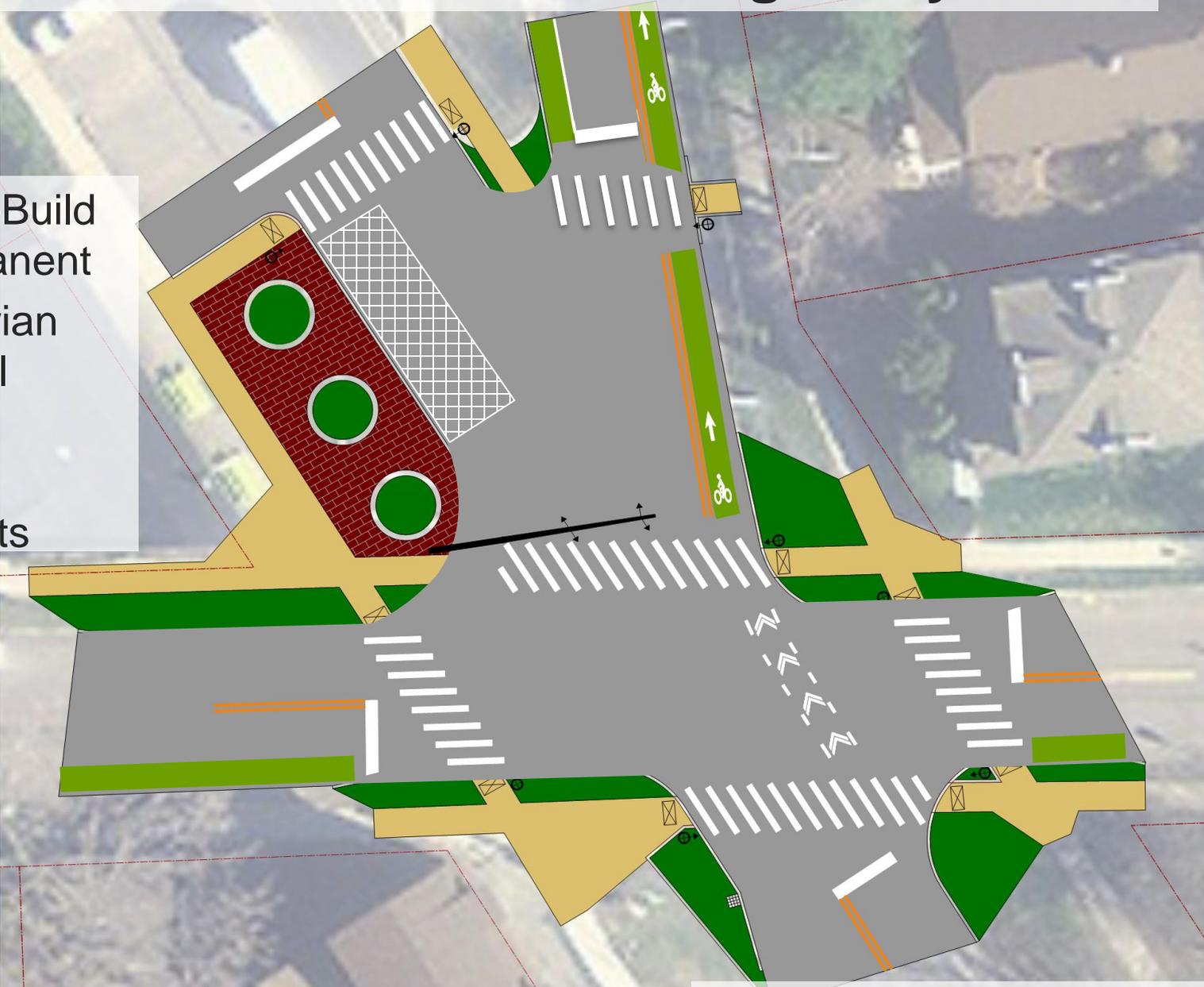
- 1. Extend Potvin Park nose as far as possible
- 2. Receiving walk north of existing driveway
- 3. Paint crosswalk, extend southbound bike lane, move stop bar



DPW Labor: \$25,000

Long Term Recommendation: New Signal System

- Make Quick-Build layout permanent
- New pedestrian signals on all approaches
- Stormwater improvements



\$1.0 – 1.5 million

Discussion

Next Steps:

- Endorse a Preferred Alternative
- Plan DPW Resources for Quick Build Parts 1 & 2 (as early as this fall)
- Look for grant funding for new signal system





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